

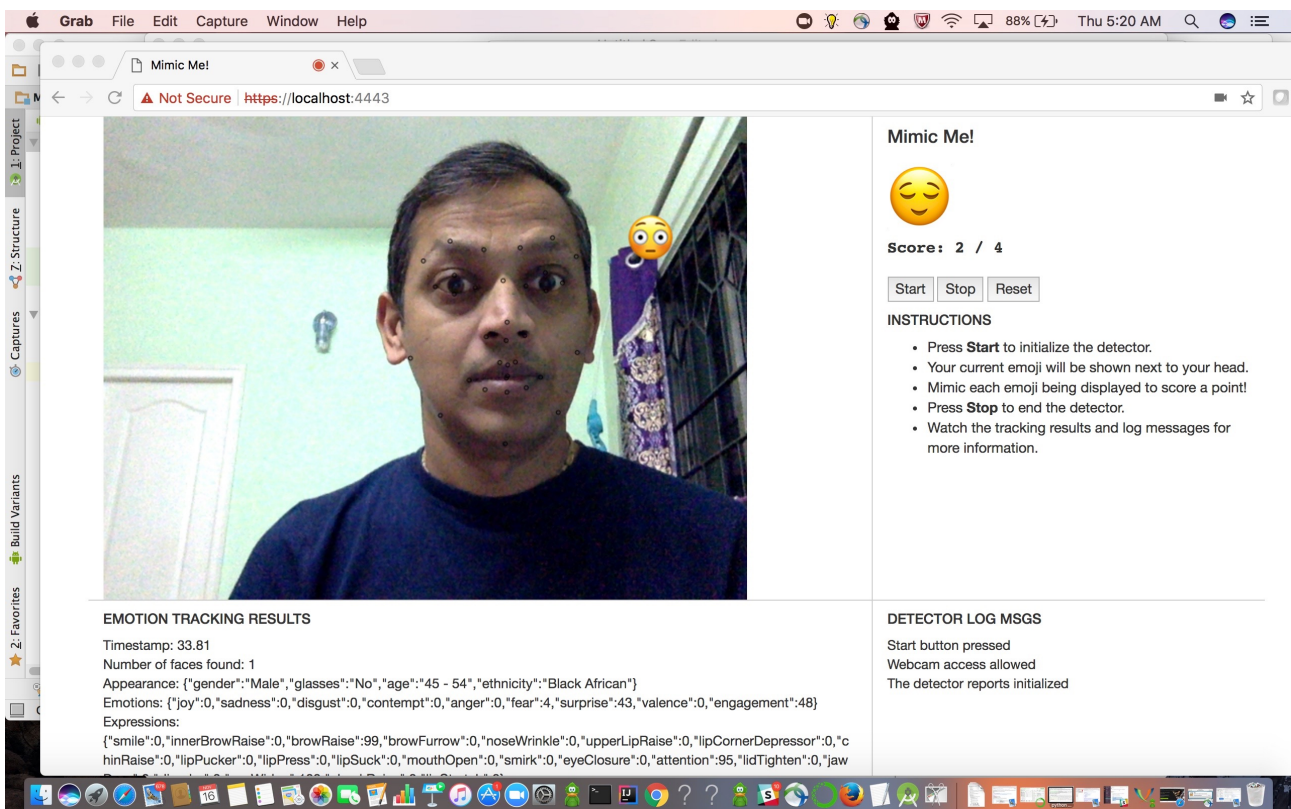
Mimic Me Mini Project

The Solution requires PopUp's to be Enabled in the Browser.

Game Strategy

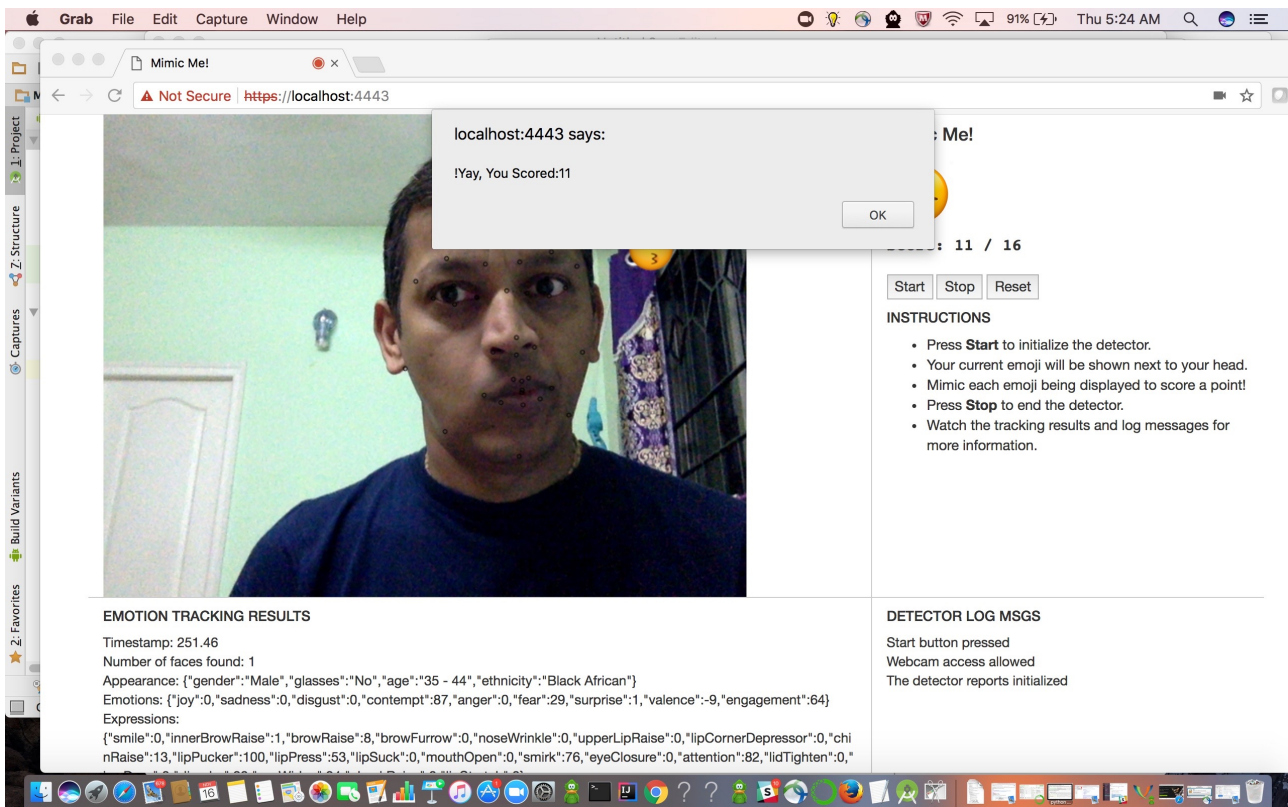
1. Show a random emoji
2. Set an Interval Timer of 10 seconds for each emoji. Switch to a new Random Emoji on IntervalTimeout
3. Set a Game timeout of 60 seconds. On timeout reset the game score and start over again
4. Change to a new Random Emoji as soon as a match is found with the player's face with a delay of 1 second.
5. The more number of faces a player matches in the given time the more his/her score
6. On Game Timeout a Popup shows the final score

Draw Feature Points And Dominant Emoji



The screenshot shows a web browser window titled "Mimic Me!" with the URL "https://localhost:4443". The main content area displays a video feed of a person's face with feature points overlaid. To the right of the video feed, there is a section titled "Mimic Me!" showing a current emoji (😌) and a score of "2 / 4". Below the score are buttons for "Start", "Stop", and "Reset". Further down, there is an "INSTRUCTIONS" section with a list of instructions: "Press **Start** to initialize the detector.", "Your current emoji will be shown next to your head.", "Mimic each emoji being displayed to score a point!", "Press **Stop** to end the detector.", and "Watch the tracking results and log messages for more information." Below the video feed, there is a section titled "EMOTION TRACKING RESULTS" showing the following data: "Timestamp: 33.81", "Number of faces found: 1", "Appearance: {\"gender\": \"Male\", \"glasses\": \"No\", \"age\": \"45 - 54\", \"ethnicity\": \"Black African\"}", "Emotions: {\"joy\": 0, \"sadness\": 0, \"disgust\": 0, \"contempt\": 0, \"anger\": 0, \"fear\": 4, \"surprise\": 43, \"valence\": 0, \"engagement\": 48}", and "Expressions: {\"smile\": 0, \"innerBrowRaise\": 0, \"browRaise\": 99, \"browFurrow\": 0, \"noseWrinkle\": 0, \"upperLipRaise\": 0, \"lipCornerDepressor\": 0, \"chinRaise\": 0, \"lipPucker\": 0, \"lipPress\": 0, \"lipSuck\": 0, \"mouthOpen\": 0, \"smirk\": 0, \"eyeClosure\": 0, \"attention\": 95, \"lidTighten\": 0, \"jaw\"". To the right of the "EMOTION TRACKING RESULTS" section, there is a section titled "DETECTOR LOG MSGS" showing the following messages: "Start button pressed", "Webcam access allowed", and "The detector reports initialized".

Show the score on Game Up

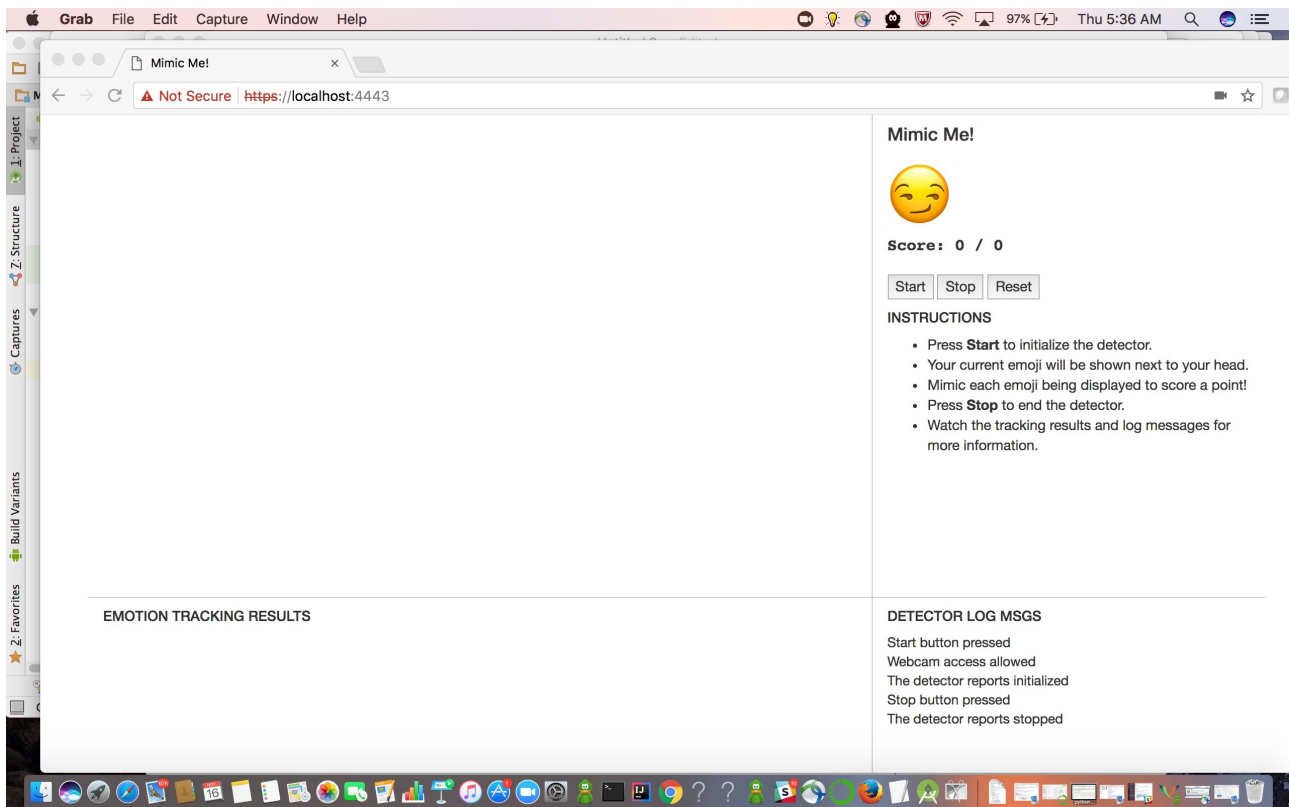


```
function onTimeout() {
  clearInterval(timerId);
  if (detector && detector.isRunning) {
    alert("!Yay, You Scored:" + score);
    restart();
  }
}
```

Clear the Interval Timer so we don't switch emoji's anymore. And show the final score. Currently the game restarts immediately once the pop-up is cleared by the player and we keep the detector running. Another option is to stop the detector at the end of the game and restart the game and detector upon player hitting start again.

Stop the Timers on Stop Button

```
// Stop button
function onStop() {
  log('#logs', "Stop button pressed");
  if (detector && detector.isRunning) {
    detector.removeEventListener();
    detector.stop(); // stop detector
  }
  clearInterval(timerId);
  clearTimeout(timeOutId);
};
```



Initialize the Game

```
function initializeGame() {  
    //draw the first one  
    drawRandomEmoji();  
    //draw a new one each 10 seconds  
    timerId = setInterval(drawRandomEmoji, 10000);  
    // game up after 60 seconds  
    timeOutId = setTimeout(onTimeOut, 60000);  
    score = 0;  
    total = 0;  
    setScore(score, total);  
}
```

draw the first random emoji, set a Interval Timer of 10 seconds and a Game Timeout of 60 seconds. Draw a new Emoji on Interval Timeout and increment the total emojis shown.

Check and Update Score

```
function checkAndUpdateScore(dominantEmoji) {  
    if (toUnicode(dominantEmoji) == emojis[current]) {  
        score += 1;  
        setScore(score, total);  
        //faster the user matches, more he/she can score  
        wait(1000);  
        drawRandomEmoji();  
    }  
}
```

This function is called upon “onImageResultsSuccess” event. And the score is incremented if there is a emoji match. A delay of 1 second is used to ensure one can see the match visually before a new random emoji shows up on the screen.

Draw Random Emoji

```
function drawRandomEmoji() {  
    current = getRandomInt(0, emojis.length - 1);  
    setTargetEmoji(emojis[current]);  
    total += 1;  
    setScore(score, total);  
}
```

Get's a random emoji for display and increments the total emoji's shown so far.

Reset

On Reset button press, we restart the game by setting the score/total to 0/0.

```
function restart() {  
    clearTimeout(timeOutId);  
    score = 0;  
    total = 0;  
    setScore(score, total);  
    if (detector && detector.isRunning) {  
        initializeGame();  
    }  
}
```

Clear the Game Timer cause reset can be hit in the middle of an ongoing game. And initialise the game only if detector is running.